



The Astroparticle Physics Conference 34th International Cosmic Ray Conference July 30 - August 6, 2015 The Hague, The Netherlands

Contribution ID: 739

Type: Poster contribution

The Calibration System of the HAWC Gamma-Ray Observatory

Tuesday 4 August 2015 16:00 (1 hour)

The HAWC collaboration has recently completed the construction of a gamma-ray observatory at an altitude of 4100 meters on the slope of the Sierra Negra volcano in the state of Puebla, Mexico. In order to achieve an optimal angular resolution, energy reconstruction, and cosmic-ray background suppression for the air showers observed by HAWC, it is crucial to obtain good timing and charge calibrations of the photosensors in the detector. The HAWC calibration is based on a laser system which is able to deliver short light pulses to all the tanks in the array. The light intensity can range over 5 orders of magnitude, broad enough to cover all the dynamic range of the PMT readout electronics. In this contribution we will present the HAWC calibration system, together with the methods used to calibrate the detector.

Collaboration

HAWC

Registration number following "ICRC2015-I/"

332

Authors: HUI, C. Michelle (Michigan Technological University); SALESA GREUS, Francisco (The Pennsylvania State University); ZHOU, Hao (Michigan Technological University); AYALA, Hugo (Michigan Technological University); LAUER, Robert (University of New Mexico)

Presenter: SALESA GREUS, Francisco (The Pennsylvania State University)

Session Classification: Poster 3 GA

Track Classification: GA-IN